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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,597	05/15/2001	Wai C. Wong	45704-GA/JPW/BJA	9652

7590

09/16/2003

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EXAMINER

COLEMAN, BRENDA LIBBY

ART UNIT

PAPER NUMBER

1624

DATE MAILED: 09/16/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/855,597

Applicant(s)
WONG et al.

Examiner
Brenda Coleman

Art Unit
1624



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Sep 2, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-16, 20-23, 25, 27-31, 41, 42, 45, and 59-67 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-16, 20-23, 25, 27-31, 41, 42, 45, and 59-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 13 6) ☐ Other:

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DETAILED ACTION

Claims 14-16, 20-23, 25, 27-31, 41, 42, 45 and 59-67 are pending in the application.

This action is in response to applicant's amendment filed September 2, 2003. Claims 13, 17-19 and 53-58 were canceled, claims 14-16, 20, 28, 29, 41 and 45 were amended and claims 59-67 were added.

The **finality of the last office action is withdrawn** in view of the new ground of rejection applied below. Thus the after final amendment will be entered.

Response to Amendment

Applicant's arguments filed September 2, 2003 have been fully considered with the following effect:

1. The applicants amendments are sufficient to overcome the 35 USC § 112, first paragraph rejections labeled paragraphs 9 and 10 in the last office action, which are hereby **withdrawn**.
2. With regards to the rejection labeled paragraph 11, it was noticed that there was a typo such that the rejection was to the definition of R₅ but it should have been to R₇.

Claims 14-16, 20-23, 25, 27-31, 41, 42, 45, 59 and 60 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The amendment to the definition of R₇ where the aryl and heteroaryl of R₇ can be substituted with the following moieties COR₄,

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CO_2R_4 , $-\text{CON}(\text{R}_4)_2$, $-\text{N}(\text{R}_4)_2$, $-\text{OR}_4$, SR_4 , $(\text{CH}_2)_o\text{OR}_4$, $(\text{CH}_2)_o\text{SR}_4$, which are not described in the specification for the genus.

Applicant is required to cancel the new matter in the reply to this Office action.

3. The applicants amendments are sufficient to overcome the 35 USC § 112, second paragraph rejections labeled paragraph 12 in the last office action, which are hereby **withdrawn**.

4. With regards to the obviousness-type double patenting rejection of claims 13-18, 20-23, 25, 27-31, 41, 42, 45 and 53-58, the applicant's arguments have been fully considered but are not found persuasive. The applicants' stated that withdrawal of this provisional rejection is proper in accordance with MPEP Section 822.01. If this were the only issue remaining this would be proper however, in view of the rejections maintained and made below the provisional obviousness-type double patenting rejection is maintained.

Claims 14-16, 20-23, 25, 27-31, 41, 42, 45 and 59-67 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of copending Application No. 09/730,458. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds, compositions and method of use of the instant invention are embraced by the compounds, compositions and method of use of copending Application No. 09/730,458.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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In view of the amendment dated September 2, 2003, the following new grounds of rejection apply:

Specification

5. The disclosure is objected to because of the following informalities: page 251 has holes punched through the text.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 66 and 67 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The addition of the species in claims 66 and 67 are not described in the specification for the genus.

Applicant is required to cancel the new matter in the reply to this Office action.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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7. Claims 14-16, 20-23, 25, 27-31, 41, 42, 45 and 59-67 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The following reasons apply:

- a) Claims 14-16, 20-23, 25, 27-31, 41, 42, 45 and 59 are vague and indefinite in that it is not known what is meant by the definition of R_1 where R_1 is $-\text{CON}(R_4)_2$. It is believed that the applicants intended subscript 2.
- b) Claims 14-16, 20-23, 25, 27-31, 41, 42, 45, 59 and 60 are vague and indefinite in that it is not known what is meant by the definition of R_5 where R_5 is aryl or heteroaryl substituted with F; Cl; Br; I; COR_3 ; CO_2R_3 ;; CN;; $\text{N}(\text{R}_3)_2$;; $(\text{CH}_2)_o\text{OR}_3$ or $(\text{CH}_2)_o\text{SR}_3$ where there is no indication of the point of attachment for these moieties as shown by all of the other definitions within the claim.
- c) Claims 14-16, 20-23, 25, 27-31, 41, 42, 45, 59 and 60 are vague and indefinite in that it is not known what is meant by the variable "o" within the moieties of the substituents on R_5 , i.e. $(\text{CH}_2)_o\text{OR}_3$ or $(\text{CH}_2)_o\text{SR}_3$, which is not defined within the claim.
- d) Claims 14-16, 20-23, 25, 27-31, 41, 42, 45, 59 and 60 are vague and indefinite in that it is not known what is meant by the definition of R_7 where R_7 is aryl or heteroaryl substituted with F; Cl; Br; I; COR_4 ; CO_2R_4 ;; CN;; $\text{N}(\text{R}_4)_2$;; $(\text{CH}_2)_o\text{OR}_4$ or $(\text{CH}_2)_o\text{SR}_4$ where there is no indication of the point of attachment for these moieties as shown by all of the other definitions within the claim.

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- e) Claims 14-16, 20-23, 25, 27-31, 41, 42, 45, 59 and 60 are vague and indefinite in that it is not known what is meant by the variable "o" within the moieties of the substituents on R₇, i.e. (CH₂)_oOR₄ or (CH₂)_oSR₄, which is not defined within the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

8. Claims 14-16, 20-23, 25, 27-31, 41, 42, 45, 59, 60 and 62-65 are rejected under 35

U.S.C. 102(e) as being anticipated by Nagarathnam et al., U.S. Patent No. 5,942,517.

Nagarathnam teaches the compounds, compositions and method of use of the instant invention where B is (4-methoxyphenyl)methylthio as shown by examples 1-4.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 14-16, 20-23, 25, 27-31, 41, 42, 45 and 59-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagarathnam et al., U.S. Patent No. 5,942,517. The generic structure of Nagarathnam encompasses the instantly claimed compounds (see Formulae, column 8) as claimed herein. Examples 1-4 which anticipates the claims of the instant invention as described above and examples 11, 18, 19, 23, etc. differ only in the nature of the A, B, R₁, R₂ and R₃ substituents. Column 8 defines A as 6 different ring moieties; B is H, straight chained or branched C₁-C₇ alkyl,; R₁ H, straight chained or branched C₁-C₇ alkyl,; R₂ H, straight chained or branched C₁-C₇ alkyl,; and R₃ is 9 different ring moieties. Compounds of the instant invention are generically embraced by Nagarathnam in view of the interchange ability of the A, B, R₁, R₂ and R₃ substituent of the pyrimidine ring system. Thus, one of ordinary skill in the art at the time the invention was made would have been motivated to select for example methyl for the variable B as well as other possibilities from the generically disclosed alternatives of the reference and in so doing obtain the instant compounds in view of the equivalency teachings outlined above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Coleman whose telephone number is (703) 305-1880. The examiner can normally be reached on Mondays from 8:30 AM to 5:00 PM, on Tuesdays from 8:00 AM to 4:30 PM, on Wednesday thru Friday from 9:00 AM to 5:30 PM.

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The fax phone number for this Group is (703) 308-4734 for “unofficial” purposes and the actual number for **OFFICIAL** business is **308-4556**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.



Brenda Coleman
Primary Examiner AU 1624
September 11, 2003